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EXAMINER	
MCDONALD, RODNEY GLENN	
ART UNIT	**PAPER NUMBER**
1753	

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/074,082	TAYLOR ET AL.	
	Examiner	Art Unit	
	Rodney G. McDonald	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-112 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-112 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10/02, 6/02.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8, 10-14, 24, 25, 27-33, 35, 37, 38, 47-58, 65, 66, 75-78, 80, 81, 83, 89, 102 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torok et al. (U.S. Pat. 4,812,711).

Torok et al. teach an arrangement for transporting air. (See Abstract) In Fig. 4 the negative terminal of a d.c. voltage source is connected to the target electrode M ***(Compare to Applicant's second electrode)*** and then to earth. ***(Compare to Applicant's voltage generator coupled to the first and second electrodes)*** The positive terminal is connected to the corona electrode K. ***(Compare to Applicant's first electrode)*** In order to prevent ions from migrating upstream from the corona electrode K, a screen electrode S ***(Compare to Applicant's focus electrode)*** is arranged upstream of the corona electrode K and connected thereto ***(Compare to Applicant's requirement for connecting the focus electrode to the first electrode)***, so that the screen electrode and the corona electrode K both have mutually the same potential. ***(Compare to Applicant's requirement for the electrodes to have substantially the same potential which as discussed above can be a positive potential from the DC source)*** The screen electrode may have one of a number of

different forms, depending upon the construction or form of the corona electrode used. When the corona electrode K comprises a thin, straight wire, the screen electrode may, for example, have the form of a rod or a helically formed wire. ***(Compare to the Applicant's rod shaped focus electrode; Compare to Applicant's requirement for a focus electrode having a curved surface; Compare to Applicant's first electrode being smaller in diameter than the focus electrode (i.e. a wire is smaller than rod))*** The screen electrode may also comprise a plurality of rods or wires arranged in mutually parallel relationship or in a diamond configuration. The screen electrode S may also be in the form of a net or grid-like structure. Alternatively, the screen electrode may comprise electrically conductive surfaces placed in the close proximity of the wall of an airflow duct 1 or on the inner surfaces of said wall. In principle, the screen electrode S is given a geometric configuration and position relative to the corona electrode K such that the screen electrode S forms an equipotential barrier or surface, which is impermeable to ions emanating from the corona electrode K. (Column 12 lines 23-53) ***(Compare to Applicant's requirement for two second electrodes and having the focus electrode in-line with the first electrode and symmetrically aligned with the first and the two second electrodes i.e. Fig. 4)***

The screen electrode S need not necessarily be electrically connected directly to the corona electrode K, but may also be connected to the one terminal of a further d.c. voltage source 4, as schematically illustrated in FIG. 5, in a manner such that the screen electrode S has the same polarity as the corona electrode K in relation to the

target electrode M, and preferably a potential which coincides substantially with the potential of the corona electrode K. (Column 12 lines 48-53)

The screen electrode can be in the form of a ring. (Column 14 lines 59-61)

In Fig. 7 the second electrode can be in the form of a ring. (See Fig. 7; Column 14 lines 49-52) ***(Compare to Applicant's requirement for a ring-shaped second electrode)***

In Fig. 9 there is multiple target electrodes with the screen electrode, corona electrode and one of the target electrodes in-line with each other. (See Fig. 9) ***(Compare to Applicant's in-line feature of the electrodes)***

In Fig. 10 there is multiple rod screen electrodes, multiple wire corona electrodes and multiple rod target electrodes. (See Fig. 10) ***(Compare to Applicant's requirement for fanning out the focus electrodes with a plurality of first electrodes, second electrodes and focus electrodes; Compare to Applicant's providing a plurality of pairs of focus electrodes associated with a plurality of first electrodes. (i.e. The focus electrodes adjacent each other are the pairs and the corona discharge electrodes adjacent to the focus electrodes are associated with them); Compare to Applicant's pair of focus electrodes associated with a first electrode)***

In Fig. 12 multiple rod screen electrodes are placed across the chamber with the corona and target electrodes in-line. (See Fig. 12***) (Compare to Applicant's pair of focus electrodes associated with a first electrode)***

In principle it is known that the transportation of air can be achieved with the aid of so-called ion-wind or corona-wind. An ion-wind is created when a corona electrode and a target electrode are arranged at a distance from one another and each connected to a respective terminal of a direct-current voltage source, the corona-electrode design and the voltage of the direct-current voltage source being such as to cause a corona discharge at the corona electrode. This corona discharge results in ionization of the air, with the ions having the same polarity as the polarity of the corona element, and possibly also electrically charged so-called aerosols, i.e. solid particles or liquid particles present in the air and becoming electrically charged upon collision with the electrically charged air ions. The air ions move rapidly, under the influence of the electric field, from the corona electrode to the target electrode, where they relinquish their electric charge and return to electrically neutral air molecules. During their passage between the electrodes, the air ions are constantly in collision with the electrically neutral air molecules, whereby the electrostatic forces are also transferred to these latter air molecules, which are thus drawn with the air ions in a direction from the corona electrode to the target electrode, thereby causing air to be transported in the form of a so-called ion-wind or corona-wind. (Column 1 lines 33-51) ***(Compare to Applicant's movement of air and use of the screen electrode, which is the focus electrode set upstream of the ion generator)***

The positive charge on the corona electrode produces less ozone and produces ions. (Column 10 lines 37-45) ***(Compare to Applicant's requirement for the first***

electrode producing more ions than the focus electrode; Compare to Applicant's requirement of ozone generation)

The corona discharge electrode can also comprise a plurality of thin wires or filaments arranged either parallel with one another or in the form of an open mesh grid or net. Instead of using straight, thin wires or filaments, the wires may be wound spirally, or thin strips exhibiting straight, serrated or undulating edge surfaces may be arranged in a similar manner. The corona electrode may also comprise one or more needle-like electrode elements ***(Compare to Applicant's requirement for pin-shaped electrodes)*** directed substantially axially in the airflow duct 1. (Column 9 lines 57-63)

In the Figures air flows in the direction of 2 along an inlet and outlet of the ducts and the first electrode is closer to the air inlet while the second electrode is closer to the air outlet (See Figures) ***(Compare to Applicant's requirement of a device that transports air)***

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-19, 22-41, 44-58, 65, 66, 75-78, 80-83, 89, 94, 98, 99 and 102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torok et al. (U.S. Pat. 4,812,711).

Torok et al. is discussed above and all is as applies above. (See Torok et al. discussed above)

The difference not yet discussed is the geometric configurations of the focus electrode.

Since Torok et al. teach that the screen electrode S (i.e. focus electrode) is a rod and given that the corona electrode (i.e. first electrode) is a wire Torok et al. is believed to suggest the focus electrode being larger than the first electrode in diameter. As to the limitation of the focus electrode having a diameter at least fifteen times larger than the first diameter of the first electrode it is believed that since Torok et al. suggest giving a geometric configuration to the focus electrode for creating an equipotential barrier upstream that this would suggest selection of Applicant's diameter based upon appropriate selection of the geometric configuration. (Column 12 lines 35-53)

Since Torok et al. teach that the screen electrode (i.e. focus electrode) can be grid-like and that the geometric configuration should be selected to create an equipotential barrier it is believed that one of ordinary skill would be lead to curve the

surface of the grid-like electrode in order to achieve the equipotential barrier as required by Applicant. (Column 12 lines 35-53)

Since Torok et al. teach that screen electrode (i.e. focus electrode) can comprise rods or wires in mutually parallel relationships or in diamond configuration and since Fig. 9 shows the screen electrode, the corona discharge electrode and at least one of the target electrodes in line it would be readily envisage including a pair of focus electrodes in-line with the first and second electrodes. In the diamond case two of the diamond points would align with the first and second electrodes. (Column 12 lines 40-42; Fig. 9)

Since Torok et al. teach that the screen electrode (i.e. focus electrode) can comprise rods or wires in mutually parallel relationships or in diamond configuration and since Fig. 10 shows the focus electrode in-line with the first electrode and symmetrically aligned with the first and second electrodes one would readily envisage including two second electrodes and a pair of focus electrodes, where the pair of focus electrodes are in-line with the first electrode and symmetrically aligned with the first and the two second electrodes. (Column 12 lines 40-42; Fig. 10)

As to the distance of the focus electrode being upstream of the first electrode by about four or five diameters of the focus electrode, from Fig. 4 it appears that the screen electrode (i.e. Focus electrode) is about four diameters upstream of the first electrode. (See Fig. 4)

As to the concave, convex focus electrodes and concave disk as discussed previously the screen electrodes can be given a geometric configuration, which will

produce an equipotential barrier therefore one would of ordinary skill in the art would readily envisage utilizing various geometric shapes so long as the equipotential barrier is created upstream of the first electrode. (Column 12 lines 49-50) As to the perforated concave disk the concave limitation is discussed in the preceding paragraph and the perforation is believed to be taught from Fig. 7 the ring shape focus electrode. (See Fig. 7; Column 14 lines 49-51)

As to the "V" shape configuration of as discussed above the screen electrodes can be given a geometric configuration, which will produce an equipotential barrier therefore one of ordinary skill in the art would readily envisage utilizing various geometric configurations so long as the equipotential barrier is created upstream of the first electrode. (Column 12 lines 49-50) Furthermore, in Fig. 12 the screen electrodes from a "V" shape if connecting their centers. (See Fig. 12)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Torok et al. by selecting particular geometric configurations for the focus electrode because it allows for creating an equipotential barrier that prevents ions from moving upstream of the ion creating electrode.

Claims 20, 21, 42, 43 and 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torok et al. as applied to claims 1-19, 22-41, 44-58, 65, 66, 75-78, 80-83, 89, 94, 98, 99 and 102 above, and further in view of Sakakibara et al. (U.S. Pat. 4,643,745).

The differences not yet discussed is where the second electrode collects particles and where the second electrode is charged opposite the first electrode such that the first electrode has a positive charge and the second electrode has a negative charge.

Sakakibara et al. teach an air cleaner. (See Abstract) Fig. 2 shows the electrical connection for the air cleaner. The terminal 41 is a negative pole of the voltage source 40 and the terminal 51 is a positive pole of the voltage source 50. The reverse connection in which the terminal 41 is positive and the terminal 51 is negative is possible according to the invention. It is important, according to the invention, that the intermediate electrode member 20 be grounded and the gradient direction of the electric field between members 10 and 20 be identical with that between members 20 and 30. (Column 3 lines 60-68; Column 4 lines 1-2)

The operation of the air cleaner shown in FIG. 1 will now be described with reference to FIG. 2. (Column 4 lines 3-4)

When a voltage of several kilovolts to several tens of kilovolts is applied by the DC voltage sources 40 and 50, respectively, a corona is generated at the tapered end of each electrode 11. Therefore, a corona discharge occurs on or adjacent to the needle electrodes 11. The corona discharge produces ions of both positive and negative polarity. The positive ions 70, which bear a reverse polarity to the needle electrodes 11, are attracted to the needle electrodes 11, whereas the negative ions 60, bearing the same polarity as the needle electrodes 11, are attracted by the intermediate electrode member 20. The negative ions 60 collide with a number of neutral gas molecules 80 in

their travel toward the intermediate electrode member 20, providing kinetic energy to move the neutral gas molecules 80. Thus, both the negative ions 60 and the neutral gas molecules 80 move toward the intermediate electrode member 20, generating an ionic wind. The flow of this wind is shown by the arrows in FIG. 2. Some of the negative ions 60 may be trapped at the intermediate electrode member 20, but the remainder pass through the member 20. The negative electron 60 passing through the member 20, accelerate in the electric field between the intermediate electrode member 20 and the counter electrode member 30. The neutral gas molecules 80 receive further energy from the accelerated negative ions 60 and the speed of the ionic wind is thus increased. (Column 4 lines 5-32)

At the vicinity of the needle electrodes 11, the corona discharge produces ozone (O.sub.3) as well as ions. This is because the energy which dissociates the molecular oxygen (O.sub.2) to atomic oxygen (O) is smaller than the ionization energy of gas molecules in the air, so that the molecular oxygen (O.sub.2), receiving energy smaller than the ionization energy and larger than the dissociation energy, is dissociated to atomic oxygen (O), which oxidizes the molecular oxygen (O.sub.2) to ozone (O.sub.3). (Column 4 lines 33-41)

The amount of ozone generated is determined mainly by the electric field strength at the vicinity of the needle electrodes 11. The voltage applied to the counter electrode member 30 does not substantially increase the ozone. Accordingly, application of voltage to the counter electrode member 30 enables increased speed of the ionic wind with less ozone generation. (Column 4 lines 42-48)

Dust and other particles carried in the air are charged by the ions and adhere to the intermediate electrode member 20 and the counter electrode member 30 by electrostatic force. Since, in this embodiment, the counter electrode member 30 includes plate electrodes 31, the charged dust can be readily adhered to it and the member 30 can function as a dust collecting electrode member. (Column 4 lines 49-56)

The motivation for utilizing a second electrode that collects particles and where the second electrode is charged opposite the first electrode such that the first electrode has a positive charge and the second electrode has a negative charge is that it allows for collecting dust. (Column 4 lines 49-56)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Torok et al. by utilizing a second electrode that collects particles and where the second electrode is charged opposite the first electrode such that the first electrode has a positive charge and the second electrode has a negative charge as taught by Sakakibara et al. because it allows for collecting dust.

Claims 59-64, 67-74 and 112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torok et al. in view of Sakakibara et al. as applied to claims 1-58, 65, 66, 75-78, 80-83, 89, 94, 98, 99, 101 and 102 above, and further in view of Wang (U.S. Pat. 5,702,507).

The difference not yet discussed is the removability of the particulate collecting second electrode.

Wang teach an air cleaner. The housing is made up of a case 1 and base 10. (Column 1 lines 54-58) The air enters through the front of the case and exits through slots 13. (Column 2 line 40 and line 58) An ion generator is present on the dust collecting plate 2 in the form of collecting means 21 and needle-like electric discharge rods 22. When supplied with electricity at a proper place the dust collecting means 21 and the electric discharge rods 22 will cooperate, causing the air to be electrically charged so as to collect such air onto the dust collecting plate 2. (Column 1 lines 61- 68; Column 2 line 1) An ozone light tube (i.e. lamp) 5 is present to restrain the propagation of bacteria. (Column 2 lines 6-19) To clean or maintain the present invention a liftable over 4 on the top in Figs. 1-3 is removed from the central cavity 11 of the case 1, the dust colleting plate 2 and filter plate 3 can be withdrawn from the central cavity 11, while the ozone tube (i.e. lamp) can be drawn directly from the electrodes 54 and the poles 51 drawn from the pole holders 53 disposed at the left and right lateral walls of the central cavity thereof. (Column 2 lines 63-68; Column 3 lines 1-5)

The motivation for providing for a removable particulate collecting second electrode from the top of the chamber is that it allows for ease in cleaning and maintenance of the device. (See Abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized a removable second electrode that collects particulates as taught by Wang because it allows for ease in cleaning and maintenance of the device.

Claims 79, 86-88, 90 and 100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torok et al. in view of Sakakibara et al. as applied to claims 1-58, 65, 66, 75-78, 80-83, 89, 94, 98, 99, 101 and 102 above, and further in view of Shibuya et al. (U.S. Pat. 3,803,808).

The differences not yet discussed are the U-shape of the second electrodes and the protective end on the second electrodes.

Shibuya et al. teach collector electrodes following corona discharge electrodes as shown in Fig. 2. A DC voltage source is connected across the electrodes. The collector electrodes are U-Shaped. (See Fig. 2; Column 2 lines 65-68; Column 3 lines 1-11) In Fig. 7 a-y represent various U-shaped configurations for the collector electrodes. The differing curved ends are the protective ends. (See Fig. 7)

The motivation for utilizing U-shaped second electrodes and protective ends is that it allows for collection of dust. (Column 1 lines 36-42)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized U-shaped electrodes with protective ends as taught by Shibuya et al. because it allows for collection of dust.

Claims 75, 84, 85, 91-93, 103 and 105-111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torok et al. (U.S. Pat. 4,812,711) in view of Shibuya et al. (U.S. Pat. 3,803,808).

Torok et al. is discussed above and all is as applies above. (See Torok et al. discussed above)

The difference between Torok et al. and the present claims is the use of a trailing electrode.

Shibuya et al. teach in Fig. 2 a corona discharge electrode 9 with opposite electrodes 10. (Column 2 lines 50-58) Further downstream are electrodes 11 and electrodes 12. (Column 2 59-62) (Electrodes 11 or 12 in Fig. 2 could be construed as the trailing electrodes) The electrodes are electrically connected. Electrodes 10 and 12 have the same potential due to the electrical connection. (Column 3 lines 5-9)

In Fig. 9 electrodes 12 could be construed as second electrodes with trailing electrodes 24 at the same potential between the second electrodes. (See Fig. 9)

As to the diameter of the leading electrodes being fifteen times greater than the diameter of each electrode within the first array it is believed that since Torok et al. suggest giving a geometric configuration to the focus electrode for creating an equipotential barrier upstream that this would suggest selection of Applicant's diameter based upon appropriate selection of the geometric configuration. (Torok et al. Column 12 lines 35-53)

As to the repelling factor of the trailing electrodes the charge of the trailing electrodes determines the repelling effect. (Column 3 lines 5-9)

The motivation for utilizing trailing electrodes is that it allows for controlling the flow of gas by electrode means. (Column 48-50)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Torok et al. by utilizing trailing electrodes

as taught by Shibuya et al. because it allows for controlling the flow of gas by electrode means.

Claims 95-97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torok et al. (U.S. Pat. 4,812,711) in view of Shibuya et al. (U.S. Pat. 3,803,808).

Torok et al. is discussed above and all is as applies above. (See Torok et al. discussed above)

The difference between Torok et al. and the present claims is that the interstitial electrode is not discussed and the electrical configuration is not discussed.

Shibuya et al. teach placing an electrode 24 midway between each electrode with the second array of electrodes. (Fig. 9; Column 4 lines 60-65) (Here the second array electrodes is construed by the Examiner to be the circles at the end of the U-Shaped structure and the interstitial electrode is construed to be element 24 between the circles) As to connecting the electrodes electrically Shibuya et al. suggest electrical connection between all the electrodes is possible using a DC source. (Column 3 lines 5-10)

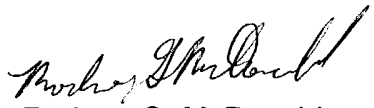
The motivation for utilizing interstitial electrodes is that it allows for sorption of dust. (Column 4 lines 62)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Torok et al. by utilizing an interstitial electrode as taught by Shibuya et al. because it allows for sorption of dust.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M- Th with Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney G. McDonald
Primary Examiner
Art Unit 1753

RM
June 24, 2004